Response ID:267 Data

1. BOSC 2017 Nominations

Self Nomination:

Yes

Nominator Information

First Name

Last Name

Nominator Title

Street Address

City

State

Postal Code

Email Address

Phone Number

Mobile Phone

Nominee Information

First Name

Kate

Last Name

Lajtha

Nominee Title

Professor

Street Address

Exemption 6

Mobile Phone

Employment Information

Place of Employment/Work:

Oregon State University, Dept. Crop and Soil Sciences

Work Street Address

3017 ALS

Work City

Corvallis

Work State:

OR

Work Postal Code

97331

Work Phone Number

541-760-1851

Work Email Address

kate.lajtha@oregonstate.edu

Sector

Academia

Qualifications

Primary Area(s) of Expertise

As the Editor-in Chief of the journal Biogeochemistry, I have broad expertise in both terrestrial and aquatic biogeochemistry, and my research has spanned both natural and human-influenced ecosystems. I have special expertise in soil health. As the Director of Oregon State University's Sustainability Degree Program, I am familiar with many aspects of ecosystem health.

Committee Preference(s)

Executive Committee
Safe and Sustainable Water Resources Subcommittee

Statement of Interest

I have experience with advisory committees both at the national level (NSF, USDA) and within universities. I have collaborated with many EPA scientists and am committed to the broad mission of the EPA and the ORD. I have time in my schedule to commit to this advisory committee and feel strongly that I can provide independent scientific and technical peer review, advice, consultation, and recommendations without bias.

Skills/qualifications related to committee preference(s) specified

My PhD is in ecosystem biogeochemistry and my research has included both soil health and water quality. I have served on many national and international committees in an advisory role and am currently a lead author for the Soils chapter of SOCCR-2.

Other Relevant Information

CV/Resume URL

2. CV/Resume

Please upload your CV/ Resume.

resume.docx

3.

BOSC Nomination

Jun 05, 2017 20:12:53 Success: Email Sent to: tracy.tom@epa.gov

4. Thank You for your Submission!

0Curriculum Vita

Kate Lajtha
Department of Crop and Soil Science
Oregon State University
3017 Agricultural and Life Science Building
Corvallis, Oregon 97331-2902
(541) 737-5674

Research Interests:

Nutrient cycling in natural and human-disturbed ecosystems, including the attenuation of increased nitrogen inputs to terrestrial ecosystems by soils and vegetation, detrital controls on soil organic matter formation

Education:

Ph.D. Duke University, Botany, 1986
B.A. Harvard University, Biology, 1979

Employment:

2010-present:	Professor, Department of Crop and Soil Science, Oregon State University
2013- present:	Director, Sustainability Program
2000-2010:	Professor, Department of Botany and Plant Pathology, Oregon State University
2002-2009:	Interim Director, Environmental Sciences Program, Oregon State University
1995-2000:	Associate Professor, Department of Botany and Plant Pathology, Oregon State University
1996-1997	Interim Director, Environmental Sciences Program, Oregon State University
1993–1995:	Associate Professor, Department of Biology, Boston University
	Associate Director, Center for Energy and Environmental Studies
	Director, Environmental Science Major
1987–1993:	Assistant Professor, Department of Biology, Boston University
1986–1987:	University Postdoctoral Fellow, Ohio State University
1981–1986:	James B. Duke and NSF Fellow, Department of Botany, Duke University

Academic Honors and Fellowships:

Springer Publishing Woman Scientist of Merit, 2013
University Honors College HerStory Award Nominee, 2012
University Honors College Outstanding Teaching Nominee, 2012
OSU National Mortar Board Student Honor Society "Top Professor" Honoree, 2000
University Honors College Outstanding Teaching Award, 2000
National Academy of Sciences Representative, US–Romanian Program in Environmental Studies, 1991-1992
Murray Buell Award at the Annual Meeting of the Ecological Society of America, 1986
University Postdoctoral Fellowship, Ohio State University, 1986
NSF Predoctoral Fellowship, 1982–1986
James B. Duke Fellowship, Duke University, 1981–1986
National Merit Scholarship to Harvard University, 1975

Graduate Students Advised:

Oregon State University:
Amy Mayedo, Ph.D. expected 2020.
Derek Pierson, Ph.D. Expected 2020.
Ester Gordon, MS expected 2018.
Lorien Reynolds, Ph.D. 2016 (co-advised, Univ. Oregon).
April Strid, MS 2015. "The homogenization of detrital leachate in an old-growth coniferous forest, OR:

DOC fluorescence signatures in soils undergoing long-term litter manipulations."
Peggy Sue Lee, PhD 2015. Hydrologic and Land Cover Effects on Sources and Fate of In-Stream Fluorescent Dissolved Organic Matter."
Todd McDonnell, Ph.D. 2014. "Spatial and Temporal Effects of Atmospheric Deposition, Climate, and Land Management on Forest Nutrient Cycling and Biodiversity."
Virginia Murphey, M.S. 2014. "Soil Organic Carbon Response to Six Years of Warming: Assessing the Impacts of Altered Diurnal Temperature Range."
Kimberly Townsend, M.S. 2013. "Changes to particulate versus mineral associated soil carbon after 50 years of litter manipulation in forest and prairie experimental ecosystems."
Jennifer Wig, M.S. 2012, "Effects of 20 Years of Litter and Root Manipulations on Soil Organic Matter Dynamics."
Kristin Peterson, Ph.D. 2012. "Post-Harvest Establishment Influences ANPP, Soil C and DOC Export in Complex Mountainous Terrain."
Jason Frentress, M.S. 2010. "Stream DOC, nitrate, and SUVA response to land use during winter base flow conditions in sub-basins of the Willamette River basin, OR."
Ricky Mauroner, PMP. 2010.
Janet Rasmussen, M.S. 2009. "Phenolics in a second-order temperate coniferous forest watershed stream and soil: implications to DON stability."
David Diaz (coadvisor), M.S. 2008.
Susan Crow, Ph.D. 2006. "Characteristics of Soil Organic Matter in Two Forest Soils."
Kristen Harrison, M.S. 2003 (co-advisor). "Litter decay processes and soil nitrogen availability in native and cheatgrass-dominated arid rangelands."
Julie Spears, Ph.D. 2002. "The imprint of coarse woody debris on soil chemical and biological properties in the Western Oregon Cascades"
Scott Holub, Ph.D. 2002. "The fate of organic and inorganic nitrogen inputs in an old-growth forest of the Central Oregon Cascade Range"
Yuriko Yano (Forest Science, co-advisor), Ph.D. 2002. "Characteristics of Dissolved Organic Matter (DOM) and Its Stabilization in a Forest Soil"
Kristin Vanderbilt (Forest Science, co-advisor), Ph.D. 2001. "Patterns of Nitrogen Fluxes in Watersheds of the H.J. Andrews Experimental Forest, OR."
Marion Brodhagen, M.S. 1998 (co-advisor), Botany and Plant Pathology. "Concentrations of secondary metabolites following manipulations of the C:N ratio in spotted knapweed, Centaurea maculosa Lam."

Boston University:

B. Keller, Ph.D. 1998. "Trace metal sorption and cycling in the Danube Delta."
A. Jamil, M.A. 1996. "Mussels as bioindicators of trace metals in the Danube Delta."
B.A. Seely, Ph.D. 1996. "Atmospheric deposition and flux dynamics of nitrogen in the coastal forests of the Waquoit Bay Watershed, MA."
K.A. Kolberg, M.A. 1994. "Trace metal chemistry and ecophysiology of the saguaro cactus in the Sonoran Desert."
J.L. Dudley, Ph.D. 1992. "Secondary succession and nitrogen availability in coastal heathlands."
C.L. Barford, M.A. 1991. "Plant litter chemistry and nitrogen cycling along a secondary successional gradient."
D.J. Padien, M.A. 1990. "Stand structure and nutrient dynamics in a pinyon-juniper community of northern New Mexico."

Teaching at Oregon State University:

SOIL/SUS 102, Introduction to Environmental Science and Sustainability. 2014 – present. BioSci Bacc Core.
BI 306H, Environmental Ecology. 1996 - present. WIC Honors College course.
BOT/FS/SOIL 547, Forest Nutrient Cycling. 1998 – 1999, 2004, 2006-present
BI 370, Ecology. 1996, 1998, 2001, 2010 - present
BI 370H, Honors Ecology, 2002 – 2012.
FS 691, Stable Isotopes in Ecological Research (2 cr. seminar). 1996.
BOT 505/605, Ecosystem Biogeochemistry, 1997 – 2005
ENSC 102, Orientation to North American Environmental Sciences, 2000 - 2003

ENSC 101, Introduction to Environmental Sciences, 2002 - 2008
BI 101, Introductory Biology. 1995 – 1996.

Departmental, College, University Service:

Chair of Search Committee, Pedologist, Crop and Soil Sciences, 2014-2015
Co-Director with M. Shinderman, Sustainability Double –Degree Program, 2012 - present
Co-chair Horticulture/CSS Undergraduate Program Committee, 2011-2012
Co-chair Oregon State University Sustainability Working Group, 2008-2012
COSINE Advisory Group member 2007-2009
Soil Rhizosphere Biologist search committee, 2006
Forest Soil Organic Biogeochemistry search committee, 2005
Advisory Board, Writing Intensive Curriculum (WIC) Program (2004-present)
University Honors College Board of Readers, 1998 - present
Director, Undergraduate Environmental Sciences Program, 2002 - 2009
Director, FIPSE Study Abroad Program in Guaymas for Environmental Science students, 1998 - 2002
Interim Director, Environmental Sciences Program, 1996-1997
Environmental Sciences Advisor, 1996 - 2002
University SAIC, 1995 -2001
Plant Ecology Curriculum Committee, 1995/6.
BPP Graduate Committee, 1996; 2008
BPP Dept. Seminar Series, 1996 - 1997
Center for the Analysis of Environmental Change (CAEC) Steering Committee, 1997 -1998
Faculty Senate 1998 -2000, 2004 - 2006
College of Science post-admission recruiting, 1998 -1999
Distance Education Ad-hoc Committee for Environmental Sciences, 1997 - 1999

Professional Service:

2017 American Geophysical Union Program Committee.
Editor-in-Chief, Biogeochemistry.
Editorial Board of the Earth Systems and Environmental Sciences Reference Module, Elsevier.
State of the Carbon Cycle Report 2: Soils chapter co-lead.

2016 Co-organizer of Carbon Cycle Interagency Working Group (CCIWG) workshop: Celebrating the 2015 International Year of Soil – Understanding Soil's Resilience and Vulnerability.
AGU liaison to the NRC U.S. National Committee for Soil Sciences.
Biogeosciences Executive Committee member, American Geophysical Union
Editor-in-Chief, Biogeochemistry.
Co-chair, AGU Technical Committee on Soils and Hydrology.
Editorial Board of the Earth Systems and Environmental Sciences Reference Module, Elsevier.
Session co-convener, Soil Change and Soil Organic Matter Dynamics: Models and Mechanisms, American Geophysical Union (AGU).
State of the Carbon Cycle Report 2: Soils chapter co-lead.

2015 Biogeosciences Executive Committee member, American Geophysical Union
Editor-in-Chief, Biogeochemistry.
Co-chair, AGU Technical Committee on Soils and Hydrology
Editorial Board of the Earth Systems and Environmental Sciences Reference Module, Elsevier
Member of Organizing Committee, 2015 US LTER All Scientists' Meeting, Estes Park, CO.

2014 Session co-convener, Global soil carbon dynamics in coupled natural and human systems, Global Land Project Open Science Meeting: Land Transformations: Between Global Challenges and Local Realities. Berlin, Germany.
Member of Scientific Committee, 6th International Conference on Soil Organic Matter Dynamics, South Carolina, USA.

Session co-convener, Soil Change and Soil Organic Matter Dynamics: Models and Mechanisms, American Geophysical Union (AGU).
Member of Organizing Committee, 2015 US LTER All Scientists' Meeting, Estes Park, CO.
Co-chair, AGU Technical Committee on Soils and Hydrology
Editor-in-Chief, Biogeochemistry.

2013 Scientific Committee, BIOGEOMON 2014.
Session co-convener, Soil Change and Soil Organic Matter Dynamics in the Anthropocene, American Geophysical Union (AGU).
Editorial Board of the Earth Systems and Environmental Sciences Reference Module, Elsevier
AGU Fellows Nominating Committee, Biogeosciences Section
Co-chair, AGU Technical Committee on Soils and Hydrology
Editor-in-Chief, Biogeochemistry.

2012 Session chair and Member of Scientific Organizing Committee, 5th International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization, 7 -11 October 2012. Monte Verità, Ascona, Lago Maggiore, Switzerland.
Session co-convener, Soil Organic Matter in the Anthropocene, .American Geophysical Union (AGU).
Editorial Board of the Earth Systems and Environmental Sciences Reference Module, Elsevier
Editor-in-Chief, Biogeochemistry.

2011 Session co-convener, Soil Organic Matter: From Models to Mechanisms, American Geophysical Union (AGU).
US member, Environmental Sciences Panel, Deutsche Forschungsgemeinschaft (German Research Foundation) for Germany's "Excellence Initiative."
Member of Organizing Committee, US LTER All Scientists' Meeting 2012.
US Member of Scientific Organizing Committee, 5th International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization, 7 -11 October 2012. Monte Verità, Ascona, Lago Maggiore, Switzerland.
Editor-in-Chief, Biogeochemistry.

2010 Session co-convener, Soil Organic Matter: From Models to Mechanisms, American Geophysical Union (AGU).
Editor-in-Chief, Biogeochemistry.

2009 Session co-convener, Soil Organic Matter: From Models to Mechanisms, American Geophysical Union (AGU).
Chair of external review committee, Swedish University of Agricultural Sciences (SLU), Soil and Aquatic Sciences Panel.
Session co-chair, "Carbon turnover in upland soils", BIOGEOMON, Helsinki, Finland.
Session chair, Soil Organic Matter Dynamics, LTER All Scientists Meeting, Estes Park, CO.
Editor-in-Chief, Biogeochemistry.

2008 Session co-convener, Soil Organic Matter: Mechanisms of Stabilization and Response to Global Change, .American Geophysical Union (AGU).
Editor-in-Chief, Biogeochemistry.

2007 Session co-convener, Soil Carbon: Mechanisms of Stabilization, American Geophysical Union (AGU).
Editor-in-Chief, Biogeochemistry.

2006 Workshop Co-convener, LTER All-scientists Meeting. Estes Park, Co.
US member, Environmental Sciences Panel, Deutsche Forschungsgemeinschaft (German Research Foundation) for Germany's "Excellence Initiative."
Editor-in-Chief, Biogeochemistry.

2005 National Ecological Observation Network (NEON) Biogeochemistry committee member.

Member of organizing committee, 2nd International Conference on Mechanisms of Soil Organic Matter Stabilization, Monterey, CA, October 9-13, 2005.
Editor-in-Chief, Biogeochemistry.

2004 Panel Member, NSF DEB Ecosystems (2004 – 2008)
Session Chair, Ecological Society of America annual meeting. Biogeochemistry: Soil and Nutrient Cycling.
Editor-in-Chief, Biogeochemistry (to present).
Invited Participant, Workshop on Root Biology, University of Michigan Biological Station, Pellston, MI.
Co-Convener, LTER Strategic Plan Workshop: Nitrogen deposition and ecosystem effects. Boulder, CO.

2003 Member, US-ILTER (International Long-Term Ecosystem Research) National Committee (to present).
Invited Member, NSF Workshop: New Frontiers in Carbon Dynamics in Soils.

2002 Co- Editor in Chief, Biogeochemistry
Chair, Corporate Award, Ecological Society of America (2002-2005)

2001 Session Chair, Ecological Society of America annual meeting: Ecosystem Processes: Decomposition and Litter.

2000 ESA Corporate Award Committee member
Peer-review Promotion Panel member, EPA Western Ecology Division

1999 Co-Organizer, ILTER (International Long Term Ecosystem Research Network) workshop: Cooperation in Long Term Ecological Research in Central and Eastern Europe. Budapest, Hungary, 1999.

1998 Invited Member/ Participant, Scientific Committee on Problems of the Environment (SCOPE) working group: Nitrogen Transport and Transformations: A Regional and Global Analysis. National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, CA
Invited Member/ Participant, ILTER (International Long Term Ecosystem Research Network): Workshop to Develop the ILTER in Poland. Warsaw, Poland.

1997 Session Chair, Third International Symposium on Ecosystem Behavior (BIOGEOMON): Nitrogen Cycling, Limitations, and Saturation in Terrestrial Ecosystems. Villanova University, PA.
Member of Organizing Committee, Ecological Society of America (ESA) SBI Workshop, Atmospheric Nitrogen Deposition to Coastal Watersheds. Univ. Rhode Island.
Committee Member, National Network of Index Sites, Office of Science and Technology Policy, The White House.

1996 Invited Participant, LTER Soils Methods Standardization Workshop. Albuquerque, NM.

1995 Associate Editor, Biogeochemistry (1995 - present)
Panel Member, USDA-NRICGP: Strengthening Awards.

1994 Panel Manager, USDA-NRICGP: Forest/Range/Crop/Aquatic Ecosystems.
Invited Participant, Scientific Committee on Problems of the Environment (SCOPE) workshop: Terrestrial N loading to the Coastal Environment. Block Island, RI.
ESA MacArthur Award Committee.
Invited Participant, International Arid Lands Consortium Workshop: Arid Lands Management - Towards Ecological Sustainability. Jerusalem, Israel.

1993 Member of Organizing Committee, Scientific Committee on Problems of the Environment (SCOPE) Workshop: Improved Management of Phosphorus Resources: A Global Perspective. Budapest, Hungary.
Session chair, Ecological Society of America national meeting: Wetland ecology: vegetation dynamics and nutrient cycling.

Invited Participant, International Geosphere-Biosphere Programme (IGBP) Core Project in Global Change and Terrestrial Ecosystems (GCTE), Transect Workshop. San Francisco, CA.
Panel Member, DOE: Problems in Ecosystem Research (PER).

1992 Ecological Society of America MacArthur Award Committee.
Panel Member, USDA-NRICGP: Forest/Rangeland/Crop Ecosystems.

1991 Panel Member, USDA-NRICGP: Forest/Rangeland/Crop Ecosystems.
Invited Participant: US-Romanian Summer Program for Young Investigators in Ecology/Environmental Sciences, National Academy of Sciences.
Invited Participant, 4th Cary Conference: Human Influences on Ecosystems: Subtle Human Effects and the Ecology of Populated Areas. Cary Arboretum, NY.
Invited Participant, NSF Workshop: Soil Warming. Woods Hole, MA.

1990 Consulting Editor, Biogeochemistry (1990-1995).
Invited Participant, NSF Workshop, Advancing Toward Closure of the Carbon, Water, and Nutrient Cycles in Temperate Forest Ecosystems. Fort Collins, Colorado.
Invited Participant, NSF Workshop, Scaling Processes Between Leaf and Landscape Levels. Snowbird, Utah.
Session chair, ESA national meeting: Ecosystem dynamics.
Invited Reviewer for Blackwell Scientific Publications, for M. Begon, J.L. Harper, and C.R. Townsend, Ecology: Individuals, Populations, Communities.

1989 Invited Participant, Arid Ecosystem Interactions Workshop, OIES/NCAR. Boulder, Colorado.
Invited Participant, Scientific Committee on Problems of the Environment (SCOPE) workshop, Terrestrial and Aquatic Phosphorus Cycles in Latin America. Caracas, Venezuela.

1988 Session chair, Ecological Society of America (ESA) national meeting: Nutrient dynamics in Arctic, grassland and desert ecosystems.
ESA Buell/Braun Awards Selection Committee.
NSF Panel Member: Postdoctoral Fellowships.

Recent Research Support:

2015 REU: LTREB Renewal: Long-term detrital controls on soil organic matter stabilization. $7,500. (NSF DEB- 1518973).

2013 LTREB: Long-term detrital controls on soil organic matter stabilization $449,322 (NSF DEB-1257032).
ECampus funds: Development of a Double-Degree in sustainability. $85,000.

2011 ROA: Long-term detrital controls on soil organic matter stabilization. $24,979. (NSF DEB- 1138086).

2009 Differential effects of asymmetric versus symmetric warming on soil organic matter stability. $121,233 (NICCR DE-FC02-06ER64159 subaward MPC 3EK1; PI, co-PI Caldwell).

REU: LTREB: Long-term detrital controls on soil organic matter stabilization . $7,000 (NSF DEB-0924668).

Soil organic matter dynamics: a cross-ecosystem approach, support for a cross-LTER workshop. $12,000 (LTER Network Office)

2008 LTREB: Long-term detrital controls on soil organic matter stabilization $400,000 (NSF DEB-0817064; PI; co-PI Caldwell)

2007 Support for the 3rd International Conference on Soil Organic Matter Stabilization in Soils and Sediments (SOM3). $10,800 (USDDA-FS; PI)

2005 Key Role of Nitrogenous Compounds in Soil Organic Matter Stabilization via Interactions with Mineral Surfaces. $389,000 (USDA CSREES 2005-35107-16336, PI Sollins)

Preferential and Stable Sorption of N- vs. C-rich Soil Organic Matter on Mineral Surfaces. $59,969 (NSF DEB-0515846 (SGER); PI Sollins).

Conference on Mechanisms of Soil Organic Matter Stabilization, Monterey, CA, October 9-13, 2005. $14,985 (NSF DEB- 0511835, PI Sollins).

Conference on Mechanisms of Soil Organic Matter Stabilization. $9,963 (USDA CSREES 2205-35107-16016; PI).

2004 DIRT (Detritus Input and Removal Treatments): A Cross-Continental Study of Controls on Soil C (Carbon) and N (Nitrogen) Dynamics. $33,530. (National Academy of Sciences, PI).

2002 Detrital controls on SOM dynamics in an old-growth Douglas-fir soil. $290,000 (USDA NRICGP 2002-35107-12249; PI, co-PI Sollins)

2001 U.S.-Hungary: A cross-continental study of controls on soil carbon and nitrogen dynamics. $33,966 (NSF INT-0002956)

Nutrient status of a disturbed desert ecosystem: mechanisms for landscape change. $63,683 (CERL; PI)

2000 Collaborative Research: Dirt: a cross-continental, experimental study of forest SOM and N dynamics. $295,942 ($128,369 to OSU) (NSF DEB-0087081)

1999 U.S. – Hungary: Workshop to plan a Carpathian Basin ILTER Network. $32, 290 (NSF INT-9901106)

1997 SOM and N dynamics in an old-growth, Douglas-fir ecosystem: a long-term experimental manipulation. $275,000 (USDA NRICGP #97-35101-4256; co-PI, P. Sollins PI)

Multi-User Biological Equipment Program. $42,298 (NSF #DBI-9729468; PI's R. Griffiths, W.A. McKee, K.Cromack Jr.; S.V. Gregory, K. Lajtha)

1995 Superfund Basic Research Center at Boston University. (NIEHS Superfund Basic Research Program #94-007; co-PI with D. Ozonoff, P.I.)

1994 Assimilative capacity and retention of heavy metals in wetlands and lakes of the Danube Delta, Romania. $50,000 (EPA)

1992 Assimilative capacity and retention of heavy metals between component ecosystems within the Danube Delta, Romania. $24,993 (EPA)

Research exchange visit to the Danube Delta of Romania. $3200. (National Research Council/National Academy of Sciences)

1991 Ecophysiological, nutrient cycling, and toxic element studies of the saguaro cactus. $25,000. (National Park Service, Air Quality Division)

Environmental Analysis and Monitoring in an Urban Environment. $23,758. (NSF/ILI, USE-9152407)

1990 Coupling of watersheds and coastal waters in Waquoit Bay. $1,967,200. (NSF/NOAA Land Margin Ecosystem Research Program, OCE-89-14729; co-PI with I. Valiela, P.I.)

AWU-DOE Faculty Fellowship, Los Alamos National Laboratory $12,000

Ecophysiological, nutrient cycling, and toxic element studies to determine the cause of the decline of the saguaro cactus in the Rincon Mountain District of Saguaro National Monument. $20,000. (National Park Service, Air Quality Division)

1989 AWU-DOE Faculty Fellowship, Los Alamos National Laboratory $12,000

1988 AWU-DOE Faculty Fellowship, Los Alamos National Laboratory $6,500

Purchase of an Isotope Ratio Mass Spectrometer. $161,400. (NSF DIR-8812235; with T. Kunz)

Invited Seminars:

2016 Soil carbon experiments across the CZRN. Boise State University, Boise ID.

What makes stable organic matter? Institute of Ecosystem Studies, Cary Arborteum.

The dirt on DIRT: what we have learned over the past 20 years, and where we are going, and why it matters for the LTER. Andrews LTER meeting, OSU.

2015 Detrital controls on soil organic matter dynamics: stories from DIRT, a cross-continental field experiment. Ecosystems Center, Woods Hole, MA.

What makes stable SOM? WSU-Vancouver.

A 10-year retrospective on DOC dynamics in small watersheds. Andrews LTER meeting, OSU.

2014 DIRT: What have we learned about soil organic matter dynamics at the Harvard Forest? Harvard Forest LTER Symposium.

2013 Will changes in ecosystem productivity alter stabilization of soil organic matter? Lessons from playing in DIRT. Centre for Global Change Science, University of Toronto.

2011 Interactive effects of cations on multi-decade trends in sulfate and acid deposition in North America and Europe: a new look at an old problem. US EPA, Corvallis, OR.

2010 Playing in DIRT: what cross-site experiments can tell us about carbon sequestration. Harvard Forest, Petersham, MA.

2009 Detrital inputs influence stabilization of soil organic matter. University of Debrecen, Hungary.

2008 Do Variations in Detrital Inputs Influence Stable Soil Organic Matter? – An Experimental Approach. Villanova University.

2007 Transformations of DOM in forested catchments: the fate of DOM from litter and soil to river export. New Mexico State University.

Soil organic matter stabilization: what long-term manipulations can tell us. Western Washington University.

2006 Ecosystem controls on soil solution chemistry. USGS, Portland, OR.

Playing in DIRT: What litter manipulations can tell us about soil biogeochemistry and soil organic matter stabilization. Dept. Zoology, Oregon State University.

Soil organic matter stabilization: what long-term manipulations can tell us. Dept. Forest Science, Oregon State University.

2004 DIRT: an experimental approach to soil organic matter studies. Institute of Ecosystem Studies, Millbrook, NY.

2002 Detrital controls on soil organic matter dynamics: stories from DIRT, a cross-continental field experiment. University of Debrecen, Hungary.

2001 Detrital controls on soil organic matter dynamics: success stories from a cross-continental manipulative experiment. University of New Mexico.

Detrital controls on soil organic matter dynamics: stories from DIRT, a cross-continental field experiment. UC-Davis.

1999 Collaboration in DIRT plots across North America. Carpathian Basin ILTER meeting, Budapest, Hungary.

1998 Carbon and nitrogen manipulations in North American forests. Carpathian Basin ILTER (International Long Term Ecosystem Research Network) working group, Warsaw, Poland.

1996 The watershed perspective: nitrogen saturation and nitrogen loss in coastal forests of Waquoit Bay, Ma. Cornell University.

1995 Retention and leaching losses of atmospherically-derived nitrogen in the aggrading coastal watershed of Waquoit Bay, MA. US EPA Laboratory, Narragansett, RI

1994 The watershed perspective: nitrogen saturation and nitrogen loss in coastal forests of Waquoit Bay, Ma. Harvard University.

Coupling of watersheds and coastal waters: nitrogen dynamics and nutrient retention in coastal forests of Waquoit Bay, Massachusetts. University of Georgia.

Coupling of watersheds and coastal waters: nitrogen dynamics and nutrient retention in coastal forests of Waquoit Bay, Massachusetts. Oregon State University.

Retention and leaching losses of atmospherically-derived nitrogen in the aggrading coastal watershed of Waquoit Bay, MA. SUNY-Binghamton, Binghamton, NY

1993 Coupling of watersheds and coastal waters: nitrogen dynamics and retention in coastal forests of Waquoit Bay, Ma. Dartmouth College.

1992 Ecophysiology of the saguaro cactus in the Sonoran Desert of Arizona. Ecosystems Center, MBL, Woods Hole, MA.

Is air pollution contributing to the decline of the saguaro cactus? National Park Service, Tucson, Arizona.

Trace metal and nutrient dynamics in the Danube Delta of Romania: remediation of a highly eutrophic wetland. University of Massachusetts at Boston, Environmental Studies Program.

1991 Ecophysiology and nutrient relations of the saguaro cactus: causes and patterns of decline. Harvard University.

1990 Photosynthesis and water-use efficiency in pinyon-juniper communities along environmental gradients. Harvard University.

Water and nutrient use in pinyon-juniper communities of northern New Mexico along environmental gradients. University of New Hampshire.

1989 Resource-use efficiency in semi-arid plant communities of northern New Mexico. University of Rhode Island.

Susceptibility of western desert ecosystems to air pollution and acid rain. National Park Service, Tucson, Arizona.

1988 The biogeochemistry of phosphorus cycling in a desert ecosystem. Ecosystems Center, Marine Biological Lab.

The biogeochemistry of resource limitation in desert ecosystems. Cornell University.

The biogeochemistry of nutrient cycling in arid and semi-arid ecosystems. Los Alamos National Laboratory.

The nature of nutrient limitations in desert ecosystems. CEES, Boston University.

1987 Effects of water and nitrogen amendments on photosynthesis, leaf demography, and resource-use efficiency in Larrea tridentata, a desert evergreen shrub. Natural Resource Ecology Lab, Colorado State University.

Published Abstracts of Papers Presented at Professional Meetings:

2016 Lajtha, K. The dirt on DIRT: what a cross-site international collaboration can tell us about controls on soil organic matter. International Long-Term Ecosystem Research Open Science Meeting, Skukuza, South Africa.

Lajtha, K., and J. Jones. Hydrologic and forest management controls on DOC dynamics in the small watersheds of the H.J. Andrews Experimental Forest, OR. AGU Annual Meeting, San Francisco.

Bailey, V. and K. Lajtha. The Second State of the Carbon Cycle Report: The Persistence and Vulnerability of Carbon in Soil (invited). AGU Annual Meeting, San Francisco.

Abramoff, R., V. Bailey, J. Jastrow, K. Lajtha, M. Mayes, and G. Shrestha. International Decade of Soil Workshop: Soil carbon vulnerability and resilience Reviewing and advancing the science toward improved decisions. DOE, Washington, D.C.

2015 Mayes, M.A., S. Reed, P. Thornton, T. Schuur, K. Lajtha, V. Bailey, G. Shrestha, J. Jastrow, M. Torn. The Contribution of Soils to North America's Current and Future Climate. AGU Annual Meeting, San Francisco.

Lajtha, K., B.S. Lee, J. Jones. Landscape controls on DOC dynamics in old-growth forested ecosystems. Critical Zone Science, Sustainability, and Services in a Changing World Conference, Purdue University.

Lajtha, K. Playing in DIRT: Insights into soil C stabilization. Critical Zone Science, Sustainability, and Services in a Changing World Conference, Purdue University.

Crow, S.E., K. Lajtha, M. Kramer. Soil Organic Matter Stabilization/Destabilization: Input Removal Exposes the Controls (invited symposium talk). Soil Science Society of America, Minneapolis.

Simpson, M.J., O. Pisani, L.H. Lin, O.O.Y. Lun, A. J. Simpson, K. Lajtha, and K.J. Nadelhoffer. Long-term variation in above and belowground plant inputs alters soil organic matter biogeochemistry at the molecular-level (invited). AGU Annual Meeting, San Francisco.

Lajtha, K. and J.A. Jones. What controls DOC flux in small watersheds? The roles of hydrology, forest management, and climate. LTER All Scientists Meeting, Estes Park, CO.

Lajtha, K. and J.A. Jones. DOC Dynamics in Small Headwater Streams: the Role of Hydrology, Climate, and Land Management. AGU Annual Meeting, San Francisco.

Strid, A., B.S. Lee, K. Lajtha. Does litter impart a detectable chemical signal on soil DOC? DOC fluorescence signatures in H.J. Andrews soils undergoing long-term litter manipulations. LTER-All Scientists Meeting, Estes Park, CO.

Lee, B.S., and K. Lajtha. Hydrologic Controls on In-Stream Optical Dissolved Organic Matter Characteristics in an Old-Growth Forest of the Oregon Cascades. LTER-All Scientists Meeting, Estes Park, CO.

Bowden, R.D., K. Lajtha, K. J. Nadelhoffer, S. Crow, L. Deem, I. Fekete, Zs. Kotroczó, J. LeMoine, L. H. Lin, O.O.Y. Lun, C. Peltre, O. Pisani , A. F. Plante, A. J. Simpson, M. J. Simpson, J. A. Tóth. Controls on Forest Soil Carbon. LTER-All Scientists Meeting, Estes Park, CO.

2014 Reynolds, L.L., M. Tfaily, K. Roscioli, K. Lajtha, R. Bowden, B. R Johnson and S. D Bridgham. Linking SOM Content, Chemistry, and Decomposition: Complex Responses to Input Manipulation and Long-term Incubation. AGU Annual Meeting, San Francisco.

Lee, B.S., A. Strid, and K. Lajtha. The Linkage between Soil, Soil Water, and a Stream in a Western Cascade Forest, Oregon. Joint Aquatic Science Meeting, Portland OR.

Strid, A., B. Lee, and K. Lajtha. Do long-term changes in organic matter inputs to forest soils affect DOM chemistry and export? AGU Annual Meeting, San Francisco.

Lee, B.S. and K. Lajtha. Spatial and Temporal Patterns of Dissolved Organic Matter Characteristics in the Upper Willamette River Basin, Oregon. AGU Annual Meeting, San Francisco.

Lee, B.S., A. Strid, and K. Lajtha. Do changes in organic matter input amount and quality affect fluorescent SOM characteristics in forest soils? 6th International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization, Kiawah, South Carolina.

Nadelhoffer, K., R.D. Bowden, S. Crow, and K. Lajtha. Detritus Inputs and Forest Soil Organic Matter Formation: Is There a Linear Relationship Between Detrital Input Rates and Soil Carbon Accumulation? SSSA International Meeting, Long Beach, CA.

2013 Lajtha, K. What playing in DIRT can tell us about controls on soil carbon sequestration. 11th INTECOL Congress, London, England. Invited talk.

Bowden, R.D., L. Deem, A. Plante, C. Peltre, K. Nadelhoffer, and K. Lajtha. Litter Controls on Soil Carbon Quantity and Quality in an Eastern Deciduous Forest. North American Forest Soils Conference.

Reynolds, L. L., K. Lajtha, R. D. Bowden, B. Johnson, and S. Bridgham. The DIRT on Q_{10}: Depletion of labile-inputs does not increase temperature sensitivity in a laboratory incubation. AGU Annual Meeting, San Francisco. Invited talk.

2012 Yarwood, S., E. Brewer, R. Yarwood, D. Myrold, and K. Lajtha. The Persistence of Soil Microbes: Active Community Composition and Capability to Respond to Litter Addition After 10-Years of No-Inputs. Ecological Society of America Annual Meetings, Portland, OR.

Reynolds, L.L., K. Lajtha, R.D. Bowden, B. Johnson, and S. Bridgham. The DIRT on Q_{10}: Differential temperature response of soils depleted of labile inputs. 5th International Workshop on Soil and

Sedimentary Organic Matter Stabilization and Destabilization, 7 -11 October 2012. Monte Verità, Ascona, Lago Maggiore, Switzerland.

K. Lajtha, H. L. Throop and M. Kramer. Changes in soil carbon following woody encroachment in a desert ecosystem. 5th International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization, 7 -11 October 2012. Monte Verità, Ascona, Lago Maggiore, Switzerland.

M.L. Mobley, D. deB. Richter, K. Lajtha, M.G. Kramer and P.R. Heine. Deep soil carbon loss under an aggrading old-field forest. 5th International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization, 7 -11 October 2012. Monte Verità, Ascona, Lago Maggiore, Switzerland.

Yarwood, S., E. Brewer, R. Yarwood, K. Lajtha, D. Myrold. The Persistence of Soil Microbes: Active Community Composition and Capability to Respond to Litter Addition After Ten Years of No-Inputs. Ecological Society of America Mid-Atlantic Branch Meeting, Blacksburg, VA.

Wig, J., K. Lajtha and K. Nadelhoffer. Twenty Years of Litter and Root Manipulations: Insights into Multi-Decadal SOM Dynamics and Controls. AGU Annual Meeting, San Francisco.

Reynolds, L.L., K. Lajtha, R.D. Bowden, B. Johnson, and S. Bridgham. The DIRT on Q_{10}: Differential temperature response of soils depleted of labile inputs. LTER All Scientists Meeting, Estes Park, CO.

Peterson, F. and K. Lajtha. Re-defining Aboveground Net Primary Productivity (ANPP) for Complex Terrain: A Case Study from the H.J. Andrews Experimental Forest. LTER All Scientists Meeting, Estes Park, CO.

Frey, S. R. Bowden, E. Brzostek, A. Burton, B. Caldwell, S. Crow, C. Goodale, S. Grandy, A. Finzi, M. Kramer, K. Lajtha, M. Martin, B. McDowell, R. Minocha, K. Nadelhoffer, S. Ollinger, P. Templer, and K. Wicking. Temperate Forest Soils Sequester as much Carbon as Trees in Response to Nitrogen Deposition. LTER All Scientists Meeting, Estes Park, CO.

2011 Mobley, M.L., D.D. Richter, M.G. Kramer, Lajtha, K. Exploring deep soil carbon loss following field-to-forest land use change. AGU Annual Meeting, San Francisco.

2010 Wig, J., K. Lajtha, C. Phillips, J. Gregg. A Comparison of Symmetric and Asymmetric Warming Regimes on the Soil Carbon and Nitrogen Dynamics of Grassland Ecosystems. AGU Annual Meeting, San Francisco.

Lajtha, K., J. Jones. Interactive effects of cations on multi-decade trends in sulfate and acid deposition in North America and Europe: a new look at an old problem. AGU Annual Meeting, San Francisco.

Frey, S D., K. Nadelhoffer, R. Bowden, E.R. Brzostek, B.A. Caldwell, S.E. Crow, A.C. Finzi, C.L. Goodale, S. Grandy, K. Lajtha, S.V. Ollinger, A.F. Plante. Soil Organic Matter Responses to Chronic Nitrogen Additions in a Temperate Forest (Invited). AGU Annual Meeting, San Francisco.

Mobley, M.L., P.R. Heine, S.A. Billings, K. Lajtha, M.G. Kramer, D.D. Richter. Soil Carbon Change During Fifty Years of Old-Field Forest Development. AGU Annual Meeting, San Francisco.

P.-J. Hatton, M. Kleber, B. Zeller, L. Gelhaye, C. Moni, A. F. Plante, K. Lajtha, D. Derrien. Transfer of litter-derived N to soil mineral-organic associations: evidence from two decadal 15N-tracer experiments. 4th International Soil Organic Matter Meeting, France.

S. Frey, K. Nadelhoffer, R. Bowden, E. Brzostek, A. Burton, B. Caldwell, S. Crow, M. Day, A. Finzi, C. Goodale, S. Grandy, K. Lajtha, J. LeMoine, R. Maclean, M. Martin, W. McDowell, A. Melvin, S. Ollinger, A. Plante, P. Templer, M. Weiss. Soil Organic Matter Responses to Chronic Nitrogen Additions in a Temperate Forest 4th International Soil Organic Matter Meeting, France.

2009 S. E. Crow, K. Lajtha, and M. Kramer. Twenty years of chronic nitrogen additions to pine and mixed deciduous stands at Harvard Forest: effects on carbon balance and dynamics differ by vegetation. Invited talk, AGU Annual Meeting, San Francisco.

M. Kramer and K. Lajtha. Soil organic matter dynamics from two oxisol soils with depth and across density fractions. AGU Annual Meeting, San Francisco.

Van Verseveld, W. J., H. B. Barnard, C. B. Graham, J. J. McDonnell, K. Lajtha, R. J. Brooks. A Hillslope Scale Sprinkling Experiment to Resolve the Double Paradox in Hydrology. EGU Annual Meeting, Vienna.

T. Klotzbücher, S. Strohmeier K. Kaiser, G. Guggenberger , K. Lajtha, R. D. Bowden, K. Kalbitz. Long-term litter manipulation effects on amino sugars and lignin in forest soils . BIOGEOMON, Helsinki, Finland.

K. Lajtha, K. Townsend, E. Brewer, B.A. Caldwell, K. Kalbitz, A. Plante. Do Variations in Detrital Inputs Influence Stable Soil Organic Matter? – An Experimental Approach. BIOGEOMON, Helsinki, Finland.

P.J. Hatton, D. Derrien, M. Kleber, K. Lajtha, B. Zeller. Suivi par fractionnement densimétrique de l'incorporation de l'azote de litières de hêtres marquées dans les associations organo-minérales. AFES, Strasbourg.

2008 H.L. Throop, K. Lajtha, P. Sollins, and H.C. Monger. Assessing Organic Carbon Stabilization in Chihuahuan Desert Soils Using Sequential Density Fractionation. AGU Annual Meeting, San Francisco.

J. Frentress, C. Kendall, K. Lajtha, and J. Jones. Spatial and Temporal Trends in the Carbon, Nitrogen, and Sulfur Isotopes of Stream DOM From 10 Watersheds at the HJ Andrews Experimental Forest. AGU Annual Meeting, San Francisco.

Kleber, M., Hatton P.J., Derrien D., Lajtha K., Zeller, B. Tracking the incorporation of 15N from labeled beech litter into mineral-organic associations. AGU Annual Meeting, San Francisco.

Nico, P. S., Hatton P.J., Derrien D., Kleber, M., Lajtha K., Zeller, B. Differentiation of organic C and N forms between density fractions: does the presence of Fe-oxides matter? AGU Annual Meeting, San Francisco.

T. Klotzbücher, K. Kaiser, G. Guggenberger , K. Lajtha, R. D. Bowden, K. Kalbitz. Effects of plant litter input on lignin degradation in forest soils. EUROSOIL.

P.J. Hatton, M. Kleber, K. Lajtha, D. Derrien, B. Zeller. Incorporation of nitrogen from decomposing ^{15}N-labeled beech litter into soil density fractions after 10 year field incubations. Joint European Stable Isotope Users Meeting, France.

A. Plante, C. Koshal, I. Virto, M. Kleber, K. Lajtha, P. Sollins. Thermal analysis of soil organic matter in density fractions. Soil Science Society of America/Geologic Society of America Joint Meetings, Houston.

J**.** Rasmussen**.** Lajtha, B**.** Caldwell. Reactive Polyphenols and Dissolved Nutrients in a Nitrogen-Limited Headwater Catchment in Western Oregon, USA. International Humic Substances Society, Russia.

S. Robinson, E. Evetts, W. Taylor, J. Toth, R. Bowden, K. Lajtha, W. H. McDowell and J.A. Aitkenhead-Peterson. Above- and below-ground litter manipulation: impact on the retention and release of dissolved C and N. Joint GSA/ASA meeting, Houston.

2007 K. Lajtha, .B. Caldwell, Y. Yano, S. Crow, and S. Kaushal. Transformations of DOM in forested catchments: the fate of DOM from litter and soil to river export. 3rd International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soils, Adelaide, Australia.

B. Caldwell, .T. Filley, P. Sollins, K. Lajtha, C. Swanston, M. Kleber, M. Kramer. Aliphatic and aromatic plant biopolymer dynamics in soil particles isolated from sequential density fractionation. AGU Annual Meeting, San Francisco.

K. Townsend, K. Lajtha, B.A. Caldwell, P. Sollins. The Origin of DIRT (Detrital Input and Removal Treatments): the Legacy of Dr. Francis D. Hole. AGU Annual Meeting, San Francisco.

J. Frentress, K. Lajtha, J. Jones, C. Kendall. Characterization of dissolved organic matter in subsurface flow and stream flow during a fall storm event in a small (10 ha) Pacific Northwest catchment. AGU Annual Meeting, San Francisco.

W. van Verseveld, K. Lajtha, J.J. McDonnell. Fingerprinting Dissolved Organic Carbon (DOC) Sources with Specific UV Absorbance (SUVA) and Fluorescence. AGU Annual Meeting, San Francisco.

K. Lajtha, K. Townsend, E. Brewer, B.A. Caldwell, K. Kalbitz, A. Plante. Do Variations in Detrital Inputs Influence Stable Soil Organic Matter? – An Experimental Approach. AGU Annual Meeting, San Francisco.

2006 W.J. van Verseveld, C.B. Graham, H.R. Barnard, J.J. McDonnell, K. Lajtha, R.J. Brooks, B.J. Bond.. Linking Water Pathways and Sources of Dissolved Organic Matter at the Hillslope Scale: A 24- Day Sprinkling Experiment. AGU Annual Meeting, San Francisco.

H. Johnson, C. Kendall, J. McDonnell, K. Lajtha, S. Griffith, C. Anderson, R. Grove, J. Frentress. Insights Into the Hydrology of the Willamette River Basin Using d18O of Water During Summer Baseflow Conditions. AGU Annual Meeting, San Francisco.

L. Nagel, R.D. Bowden, J.A. Tóth , J. Aitkenhead-Peterson and K. Lajtha. 2006. Rapid Changes in Soil Carbon and Organic Matter at the Sikfokut International Long-Term Ecological Research Site, northeast Hungary NSF Long-Term Ecological Research Site All-Scientists Meeting, Estes Park, CO.

C. Kendall, K. Lajtha, J. Frentress, J. McDonnell, H. Johnson, C. Anderson, R. Grove, S. Griffith. Tracing Sources of Nitrate and Organic Matter in the Willamette River Basin During Summer Baseflow Conditions using Isotopic Techniques. AGU Annual Meeting, San Francisco.

B. Caldwell, K. Lajtha, S. Crow. Reactive Polyphenols: Adding a Functionality to DOM. AGU Annual Meeting, San Francisco.

K. Lajtha, Y. Yano, S. Crow, S. Kaushal. Transformations of DOM in forested catchments: the fate of DOM from litter and soil to river export. AGU Annual Meeting, San Francisco.

W. van Verseveld, C. Graham, H. Barnard, J. McDonnell, K. Lajtha, J. R. Brooks, B. Bond. Linking water pathways and nutrient sources in a small headwater catchment: A controlled sprinkler experiment at the HJ Andrews Experimental Forest, Oregon USA. LTER All-Scientists's Meeting, Estes Park, CO.

E. Sulzman, B. Bond, K. Lajtha, B. Caldwell, Z. Kayler, M. Hauck, T. Pypker, M. Unsworth, and A. Mix Links between the subsurface biosphere and the atmosphere: examples from DIRT and Airshed. SBI Conference, Newport OR.

S. E. Crow, T. R. Filley, B. A. Caldwell, K. Lajtha. Different input sources dominate soil organic matter dynamics at 2 forested sites (DIRT Project). Soil Science Society of America Annual Meeting, Indianapolis.

K. Lajtha, S. Crow, B. Caldwell, Y. Yano, E. Sulzman, P. Sollins. Above - and belowground litter controls on forest soil dynamics. Soil Science Society of America Annual Meeting, Indianapolis.

B. Caldwell, K. Lajtha, P. Sollins. Enzymatic activity against beta-glucans in forest soils: distinguishing the processing of litter versus soil polysaccharides. Soil Science Society of America Annual Meeting, Indianapolis.

Van Verseveld, W., J. McDonnell, C. Graham, H. Barnard, K. Lajtha, B. Bond, R. Brooks. Linking Water Pathways and Nutrient Sources during a Hillslope Scale Sprinkler Experiment, HJ Andrews Experimental Forest. 3rd APHA Conference, Bankok, Thailand.

Caldwell, B.A., K. Lajtha., P. Sollins. Diversity of soil protease activities: separating bacterial and fungal contributions. BIOGEOMON, Santa Cruz, CA.

Townsend, K.L., B.A. Caldwell, S. Crow, K. Lajtha. Litter manipulation and C quality: a cross-site comparison. BIOGEOMON, Santa Cruz, CA.

Crow, S.E., K. Lajtha, C. Swanston, B.A. Caldwell, T. Filley, K. Townsend. Response of organic matter fractions to alterations in litter inputs. BIOGEOMON, Santa Cruz, CA.

2005 S. Crow, H. Keirstead, K. Lajtha, E. Sulzman, R. Brooks, C. Swanston, and P. Sollins. Interpreting density fractions – in search of meaningful soil organic matter pools. 2nd International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soils. Asilomar, CA.

B. Caldwell, K. Lajtha, K. Nadelhoffer, R.D. Bowden, S. Crow, and P. Sollins. Detritus Input and Removal Treatments (DIRT) as an experimental approach to studying SOM dynamics. 2nd International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soils. Asilomar, CA.

P. Sollins, C. Swanston, M. Kleber, K. Lajtha, M. Kramer, T. Filley, .S. Crow, B. Caldwell, R. Bowden, and D. Beilman. Organic C and N stabilization in a forest soil: evidence from sequential density fractionation 2nd International Conference on Mechanisms of Organic Matter Stabilization and Destabilization in Soils. Asilomar, CA.

P. Sollins, C. Swanston, M. Kleber, K. Lajtha, M. Kramer, T. Filley, .S. Crow, B. Caldwell, R. Bowden, and D. Beilman. Organic C and N stabilization in a forest soil: evidence from sequential density fractionation International Meeting of Organic Geochemistry (IMOG), Seville, Spain.

Van Verseveld, W. J., J.J. McDonnell, and K. Lajtha. Hydrological controls on nitrogen and DOC transport at the plot, hillslope and catchment scale, HJ Andrews Experimental Forest. AGU Annual Meeting, San Francisco.

2004 P. Sollins, T. Filley, S. Crow, C. Swanston, K. Lajtha, and B. Caldwell. Control of SOM Stabilization by Preferential Sorption of Nitrogenous Compounds. AGU Annual Meeting, San Francisco.

K. Lajtha, S. Crow, Y. Yano, S. Kaushal, E. Sulzman, P. Sollins. Detrital Controls on Dissolved Organic Matter in Soils: A Field Experiment. AGU Annual Meeting, San Francisco.

S.E. Crow and K. Lajtha. Nitrogen addition as a result long-term root removal affects soil organic matter dynamics. AGU Annual Meeting, San Francisco.

E.W. Sulzman, R. Bowden, K. Lajtha. On-Line Isotopic Analysis of Soil-Respired CO_2 AGU Annual Meeting, San Francisco.

E.W. Sulzman, J.B. Brant, S.E. Crow, W. Rugh, J. Moore, and K. Lajtha. Soil CO_2 efflux from forest soils: Isotopic composition and the role of roots. ESA annual meeting.

Lajtha, K. Detrital controls on soil organic matter dynamics and soil solution chemistry: An experimental approach. ESA annual meeting.

2003 Cairns, M. and K. Lajtha. Carbon and nitrogen pools in Oregon Cascades forests over a successional gradient. EOS (Trans. AGU) 79(45): F320.

K. Lajtha, Y. Yano, E. Sulzman, S. Crow, R.D. Bowden, B. Caldwell, K. Nadelhoffer, J. Toth, K. Vanderbilt. Detrital control of soil organic matter dynamics: an experimental approach. International Conference on Mechanisms and Regulation of Organic Matter Stabilisation in Soils. Munich, Germany. Abstracts p. 40

Crow, S.E. and K. Lajtha. Effects of manipulating detrital inputs on the lability of soil density fractions. International Conference on Mechanisms and Regulation of Organic Matter Stabilisation in Soils. Munich, Germany. Abstracts p. 106

B. A. Caldwell , K. Lajtha , E. Sulzman, R. Bowden, P. Micks, K. Nadelhoffer, J. Toth, K. Vanderbilt. Detrital controls on microbial processing of SOM in four forest soils. International Conference on Mechanisms and Regulation of Organic Matter Stabilisation in Soils. Munich, Germany. Abstracts p. 104

Sulzman, E., K. Lajtha, R. Bowden, J. Brant, B. Caldwell, S. Crow, H. Keirstead, K. Nadelhoffer, J. Toth, K. Vanderbilt, Y. Yano. An experimental approach toward understanding soil organic matter dynamics. LTER All-Scientists' Meeting, Seattle, WA.

Y. Yano, K. Lajtha, P. Sollins, B. Caldwell. Effects of litter quality on dissolved organic matter and its dynamics in a temperate coniferous forest soil. 4th North American Forest Ecology Workshop. June 16-20, 2003. Corvallis, Oregon

B.A. Caldwell, B. Baros, R.D. Bowden, M. Copeland, S. Crow, K. Lajtha, P. Micks, K. Nadelhoffer, W.H. McDowell, E. Sulzman, J. Toth, and K. Vanderbilt. Influence of Detrital Inputs on Carbon Processing in Forest Soils. North American Forest Soils Conference, Montreal.

J. Aitkenhead-Peterson, W. McDowell, K. Lajtha, P. Micks and K. Nadelhoffer. Sources and Dynamics of Dissolved Organic Carbon and Nitrogen in a Hardwood Forest Floor. Harvard Forest Symposium, Petersham MA.

2001 K. Lajtha, J.D.H. Spears, S. Holub, Y. Yano, B. Caldwell, Detrital controls on SOM and nutrient dynamics in an old-growth forest soil. ESA meeting in Madison, WI Abstracts p. 137.

Y. Yano, K. Lajtha, P. Sollins, B. Caldwell, J. Spears, Characteristics of dissolved organic matter and its stabilization in forest soil. ESA meeting in Madison, WI Abstracts p. 240-241.

J. Spears and K. Lajtha, Coarse woody debris may influence soil chemistry and direct pedogenesis towards podzolization in the Oregon Cascades. ESA meeting in Madison, WI Abstracts p. 210.

S. Holub and K. Lajtha, The fate and retention of organic and inorganic nitrogen in a western Oregon coniferous forest. ESA meeting in Madison, WI Abstracts p. 115-116.

2000 K. Lajtha, B. Caldwell, R. Bowden, D.Coleman, W. Currie, S. Hobbie, B. McDowell, J. Moore, K. Nadelhoffer, J. Toth. DIRT: a cross-continental, experimental study of forest SOM and N dynamics. ESA Abstracts p. 392.

J.D.H. Spears, K. Lajtha, S.B. Pennington, B.A. Caldwell, K. Vanderbilt. Contrasting and comparing the species effects of a nitrogen fixing species, *Ceanothus velutinus*, and a non-nitrogen-fixing species,

Pseudotsuga menziesii, Douglas-fir, on soil phosphorus and nitrogen properties in the Oregon Cascades. ESA Abstracts p. 340.

Yano, Y., K. Lajtha, P. Sollins, B. Caldwell, and J. Spears. Characteristics of DOC and its stabilization in forest soils. AGU Annual Meeting Abstracts, Dec. 2000.

1999 van Breemen, N., E. Boyer, N. Jaworski, K. Lajtha, K.J. Nadelhoffer, D. Van Damme. Estimated losses and storage of N inputs to 15 watersheds of the mid-Atlantic and New England states, USA. ESA Abstracts p. 37.

1998 Vanderbilt, K.L., K. Lajtha, and F.J. Swanson. Physical and biological processes affecting patterns of N export from small experimental watersheds in the Western Cascades, Oregon EOS (Trans. AGU) 79(45): F320.

1997 Lajtha, K., B. Keller, A. Jamil, S. Radan, G. Rusza, C. Postolache, S. Cristofor. The biogeochemistry and bioavailability of trace metals in lakes and wetlands of the Danube Delta, Romania. Journal of Conference Abstracts: Biogeomon 2: 228.

Lajtha, K., B. Keller, A. Jamil, S. Radan, G. Rusza, C. Postolache, S. Cristofor. The biogeochemistry and bioavailability of trace metals in lakes and wetlands of the Danube Delta, Romania. ESA Bulletin 78: 273.

Whytemare, A., R. Edmonds, J. Aber, K. Lajtha. Influence of excess nitrogen deposition on a white spruce (*Picea glauca*) stand in southern Alaska. ESA Bulletin 78: 207.

Transformations and retention of nitrogen in a coastal forest ecosystem: seasonal constraints. EOS (Trans. AGU) 78(46): F221.

1996 Vanderbilt, K., K. Lajtha, F. Swanson. Nitrogen losses from experimental watersheds in western Oregon. ESA Bulletin 77:454.

Lajtha, K., B. Seely. Tracing nitrogen retention and nitrogen losses in an urbanized coastal watershed: results from Waquoit Bay, MA. Chapman Conference Program Abstracts p. 23.

1995 N, P, and heavy metal dynamics in wetlands and lakes of the Danube Delta, Romania. ESA Bulletin 76: 354-355.

Anthropogenic nitrogen inputs to North Atlantic watersheds: how much reaches the rivers? ESA Bulletin 76:342. (R. Howarth presenting)

Application of a ^{15}N tracer to simulate and track the fate of atmospherically-deposited N in the coastal forests of the Waquoit Bay watershed, Cape Cod, MA. ESA Bulletin 76: 386. (B. Seely presenting)

Assimilative capacity and retention of trace metals in wetlands and lakes of the Danube Delta, Romania. Society of Wetland Scientists, 16th Annual Meeting, Boston, MA. (B. Keller presenting)

1993 Coupling of watersheds and coastal waters: nitrogen dynamics and retention in coastal forests of Waquoit Bay, Ma. ESA Bulletin 74: 321.

Coupling of watersheds and coastal waters: nitrogen dynamics and retention in coastal forests of Waquoit Bay, Ma. 12th International Estuarine Research Conference, Hilton Head. Program Abstracts.

1991 Land-Margin Ecosystem Research: Effects of forest uptake and deforestation on nutrient and freshwater inputs to Waquoit Bay, Massachusetts. 11th International Estuarine Research Conference, San Francisco. Program Abstracts p. 77.

Ecophysiology and nutrient relations of the saguaro cactus: causes and patterns of decline. ESA, San Antonio. ESA Bulletin 72:167-168.

1990 Resource-use efficiency in pinyon-juniper communities along an elevational gradient in northern New Mexico. ESA, Snowbird, Utah. ESA Bulletin 71:221-222.

1989 Resource availability, chemical defense and herbivory. Gordon Research Conferences. (with G. Cooper-Driver and C.D. Dustin).

Nutrient uptake and growth in eastern deciduous tree seedlings. ESA, University of Toronto. ESA Bulletin 70:176.

1988 The effect of varying nitrogen and phosphorus availability on nutrient use by Larrea tridentata, a desert evergreen shrub. ESA, University of California at Davis. ESA Bulletin 69:193.

1987 Effects of water and nitrogen amendments on nutrient conservation, leaf demography, and photosynthesis in a desert shrub. ESA, Ohio State University. ESA Bulletin 68:345-346.

1986 The biogeochemistry of phosphorus cycling and phosphorus availability in a calcareous desert ecosystem. IV International Congress of Ecology, State University of New York at Syracuse. Program Abstracts and ESA Bulletin 67:209-210.

Invited Symposium Paper (with W.H. Schlesinger): Geomorphology and desert ecosystems. ESA, State University of New York at Syracuse. Program Abstracts and ESA Bulletin 67:300.

1985 Invited Symposium Paper: Landscape patterns of soil chemistry in the Chihuahuan Desert. ESA, University of Minnesota. ESA Bulletin 66:213.

1984 Plant response to variations in nitrogen availability in a desert shrubland community. ESA, Colorado State University. ESA Bulletin 65:101.

Scientific Publications:

Lajtha, K., and J.A. Jones. Hydrologic and management controls on DOC dynamics in the small watersheds of the H.J. Andrews Experimental Forest, OR.

Reynolds,' L.L., K. Lajtha, R. D. Bowden, M. Tfaily, B. R. Johnson, and S. D. Bridgham. Insights into soil C cycling from long-term input-manipulation and high-resolution mass spectroscopy.

Lee, B.S., K. Lajtha, J.A Jones, A. E White. Seasonal and Land Use Effects on UV and Fluorescent Dissolved Organic Matter Characteristics in Streams of a Mixed Landscape.

Lajtha, K., R. D. Bowden, S. Crow, I. Fekete, Z. Kotroczó, A. Plante, M. Simpson, K. Nadelhoffer. The Detrital Input and Removal Treatment (DIRT) project: insights into soil carbon stabilization. Science of the Total Environment, in review.

Wang, J., O. Pisani, L.H. Lin, O.O.Y. Lun, R.D. Bowden, K. Lajtha, A.J. Simpson, and M.J. Simpson. Long-term litter manipulation alters soil organic matter turnover in a temperate forest. Science of the Total Environment, in review.

Bailey, V., B. Bond-Lamberty, K. DeAngelis, A. S. Grandy, C. Hawkes, K. Heckman, K. Lajtha, R. Phillips, B. N. Sulman, K. Todd-Brown, M. D. Wallenstein. Effective soil process and property proxies are key to predicting climate change interactions with terrestrial systems. Submitted to Global Change Biology.

Jackson, R.B., K. Lajtha, S.E. Crow, G. Hugelius, M.G. Kramer, and G. Piñeiro. 2017. The ecology of soil carbon: pools, vulnerabilities, and biotic and abiotic controls. Annual Review of Ecology and Systematics, in press.

Beni, Á., K. Lajtha, J. Kozma, and I. Fekete. 2017. Application of a Stir Bar Sorptive Extraction sample preparation method with HPLC for soil fungal biomass determination in soils from a detrital manipulation study. Journal of Microbiological Methods, in press.

Fekete I., K. Lajtha, Zs. Kotroczó, Cs. Varga, G. Várbíró, J.A. Tóth, I. Demeter, G. Veperdi, I. Berki. 2017. Long term effects of climate change on carbon storage in a Central European oak forest. Global Change Biology, in press.

Lee, B.S., and K. Lajtha. 2017. Hydrologic and Forest Management Controls on Dissolved Organic Matter Characteristics in Headwater Streams of Old-Growth Forests in the Oregon Cascades. Plant and Soil, in press.

Reynolds, L.L., K. Lajtha, R. D. Bowden, B. R. Johnson, and S. D. Bridgham. The carbon quality-temperature hypothesis fails to consistently predict temperature sensitivity in two manipulative ecosystem experiments. Global Change Biology, in review.

Kramer, M., K. Lajtha and A. Audfenkampe. 2017. Natural abundance ^{15}N and C/N soil depth trends are controlled more by association with minerals than by microbial decay. Biogeochemistry, in press.

Lajtha, K., and 32 others. 2017. Brave New World. Biogeochemistry 133: 3-5.

Mayes, M. A., K. Lajtha, and V. Bailey. 2016. Advancing soil carbon cycle science, *Eos, 97,* doi:10.1029/2016EO056881.

Strid, A., B. S. Lee, and K. Lajtha. 2016. Homogenization of detrital leachate in an old-growth coniferous forest, OR: DOC fluorescence signatures in soils undergoing long-term litter manipulations. Plant and Soil **408**:133-148.

Phillips, C. L., V. Murphey, K. Lajtha, and J. W. Gregg. 2016. Asymmetric and symmetric warming increases turnover of litter and unprotected soil C in grassland mesocosms. Biogeochemistry **128**:217-231.

Pisani, O., L. H. Lin, O. O. Y. Lun, K. Lajtha, K. J. Nadelhoffer, A. J. Simpson, and M. J. Simpson. 2016. Long-term doubling of litter inputs accelerates soil organic matter degradation and reduces soil carbon stocks. Biogeochemistry Letters **127**:1-14.

Fekete, I., C. Varga, B. Biró, J. A. Tóth, G. Várbíró, K. Lajtha, G. Szabó, and Z. Kotroczó. 2016. The effects of litter production and litter depth on soil microclimate in a central european deciduous forest. Plant and Soil **398**:291-300.

Hunt, N. D., S. T. Gower, K. Nadelhoffer, K. Lajtha, K. Townsend, and K. R. Brye. 2016. Validation of an agroecosystem process model (AGRO-BGC) on annual and perennial bioenergy feedstocks. Ecological Modelling **321**:23-34.

Cenini, V., D. Fornara, G. McMullan, N. Ternan, K. Lajtha, and M. Crawley. 2015. Chronic nitrogen fertilization and carbon sequestration in grassland soils: evidence of a microbial enzyme link. Biogeochemistry **126**:301-313.

Veres, Z., Z. Kotroczó, I. Fekete, J. A. Tóth, K. Lajtha, K. Townsend, and B. Tóthmérész. 2015. Soil extracellular enzyme activities are sensitive indicators of detrital inputs and carbon availability. Applied Soil Ecology 92:18-23.

Mobley, M.L., K. Lajtha, M. G. Kramer, A.R. Bacon, P. R. Heine, and Daniel deB. Richter. 2015. Surficial gains and subsoil losses of soil C and N during secondary forest development. Global Change Biology 21: 986–996.

Bowden, R.D., L. Deem, K. Nadelhoffer, A. Plante, and K. Lajtha. 2014. Above and belowground litter influences on soil organic matter and carbon in a temperate deciduous forest. Soil Science Society of America Journal 78: S66-S75.

Beni, A., E. Soki, K. Lajtha, and I. Fekete. 2014. An optimised HPLC method for soil fungal biomass determination and its application to a detritus manipulation study. Journal of Microbial Methods, 103:124–130.

Mayzelle, M. M., M. L. Krusor, R. D. Bowden, K. Lajtha, and J. W. Six. 2014. The effects of decreasing carbon saturation deficit on temperate forest soil carbon cycling. Soil Science Society of America Journal 78: S76-S83.

Lajtha, K., R.D. Bowden, and K. Nadelhoffer. 2014. Litter and root manipulations provide insights into soil organic matter dynamics and stability. Soil Science Society of America Journal 78: S261-S269.

Frey, S. D., S. Ollinger, K. Nadelhoffer, R. Bowden, E. Brzostek, A. Burton, B. Caldwell, S. Crow, C. Goodale, S. Grandy, A. Finzi, M. Kramer, K. Lajtha, J. LeMoine, M. Martin, W. McDowell, R. Minocha, J. J. Sadowsky, P. Templer, and K. Wicking. 2014. Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. Biogeochemistry Letters **121**:305–316.

Fekete, I., Z. Kotroczó, C. Varga, P. T. Nagy, J. A. Tóth, R. D. Bowden, G. Várbíró, and K. Lajtha. 2014. Alterations in forest detritus inputs influence soil carbon concentration and soil respiration in a Central-European deciduous forest. Soil Biology and Biochemistry 74:106-114.

Lajtha, K., K. Townsend, M.G. Kramer, C. Swanston, R. D. Bowden, K. Nadelhoffer. 2014. Changes to particulate versus mineral associated soil carbon after 50 years of litter manipulation in forest and prairie experimental ecosystems. Biogeochemistry 119:341-360.

Kotroczó, Z., Z. Veres, I. Fekete, Z. Krakomperger, J. A. Tóth, K. Lajtha, and B. Tóthmérész. 2014. Soil enzyme activity in response to long-term organic matter manipulation. Soil Biology and Biochemistry **70**:237-243.

Peterson, F. S. and K. J. Lajtha. 2013. Linking aboveground net primary productivity to soil carbon and dissolved organic carbon in complex terrain. Journal of Geophysical Research: Biogeosciences **118**:1225-1236.

Peterson, F. S., J. Sexton, and K. Lajtha. 2013. Scaling litter fall in complex terrain: A study from the western Cascades Range, Oregon. Forest Ecology and Management **306**:118-127.

Lajtha, K., and J. Jones. 2013. Trends in cations, sulfate, and acid deposition in North America and Europe from 1978 to 2010: a new look at an old problem. Biogeochemistry **116**:303–334.

Klotzbücher, T., S. Strohmeier, K. Kaiser, R. Bowden, K. Lajtha, H. Ohm, K. Kalbitz. 2013. Lignin properties in topsoils of a beech/oak forest after 8 years of manipulated litter fall: relevance of altered input and oxidation of lignin. Plant and Soil 367:579–589.

Yarwood, S., E. Brewer, R. Yarwood, K. Lajtha, and D. Myrold. 2013. The Persistence of Soil Microbes: Active Community Composition and Capability to Respond to Litter Addition After 12-Years of No-Inputs. International Society for Microbial Ecology 79:1385-1392.

Throop, H.L., K. Lajtha, M. Kramer. 2013. Density fractionation and ^{13}C reveal changes in soil carbon following woody encroachment in a desert ecosystem. Biogeochemistry, 112:409–422.

Hatton, P.-J., M. Kleber, B. Zeller, C. Moni, A. F. Plante, K. Townsend, L. Gelhaye, K. Lajtha, D. Derrien. 2012. Transfer of litter-derived N to soil mineral-organic associations: evidence from decadal ^{15}N tracer

experiments. Organic Geochemistry 42 1489–1501.

Richter, D. deB., S. S. Andrews, R. Bacon, S. Billings, C.A. Cambardella, N. Cavallaro, J.E. DeMeester, A.J. Franzluebbers , A.S. Grandy, S. Grunwald, J. Gruver, A.S. Hartshorn, H. Janzen, M.G. Kramer, J.K. Ladha, K. Lajtha, G.C. Liles, D. Markewitz, P.J. Megonigal, A.R. Mermut, M.A. Mobley, C. Rasmussen, C.J. Richardson, D.A. Robinson, P. Smith, C. Stiles, R. L. Tate, A. Thompson, A.J. Tugel, H. van Es, L. West, S. Wills, D. Yaalon, and T.M. Zobeck. 2011. Human-Soil Relations are Changing Rapidly: Proposals from SSSA's New Cross-Divisional Working Group on Soil Change. Soil Science Society of America Journal 75: 2079-2084.

Tóth, J. A., P. T. Nagy, Z. Krakomperger, Z. Veres, Z. Kotroczó, S. Kincses, I. Fekete, M. Papp, and K. Lajtha. 2011. Effect of Litter Fall on Soil Nutrient Content and pH, and its Consequences in View of Climate Change (Síkfőkút DIRT Project). Acta Silv. Lign. Hung. **7** 75-86.

Lajtha, K. and P. C. Baveye. 2010. How should we deal with the growing peer-review problem? Biogeochemistry 101:1-3.

Lajtha, K. and J. Jones. 2010. Precipitation control over inorganic nitrogen import–export budgets across watersheds: problems with interpretation and analysis. Ecohydrology 1(2): 105–117

Hartman, M.D., Baron, J.S., Clow, D.W., Creed, I.F., Driscoll, C.T., Ewing, H.A., Haines, B.D., Knoepp, J., Lajtha, K., Ojima, D.S., Parton, W.J., Renfro, J., Robinson, R.B., Van Miegroet, H., Weathers, K.C., and Williams, M.W. 2009. DayCent-Chem simulations of ecological and biogeochemical processes of eight mountain ecosystems in the United States: U.S. Geological Survey Scientific Investigations Report 2009–5150, 174 p.

Sollins, P., M. Kramer, M. Kleber, K. Lajtha, C. Swanston, T. Filley, A. Aufdenkampe, R. Wagai, R. Bowden. 2009. Organic C and N stabilization across soils of contrasting mineralogy: further evidence from sequential density fractionation. Biogeochemistry 96: 209-231.

Cairns,' M. A., K. Lajtha and P. A. Beedlow 2009. Carbon and nitrogen losses from forests of the Oregon Cascades over a successional gradient. Plant and Soil 318:185–196.

Kramer, M.G., K. Lajtha, G. Thomas, P. Sollins. 2009. Contamination effects on soil density fractions from high N or C content sodium polytungstate. Biogeochemistry 92:177–181.

Crow, S. E., K. Lajtha, T. R. Filley, C. W. Swanston, R. D. Bowden, and B. A. Caldwell. 2009. Sources of plant-derived carbon and stability of organic matter in soil: implications for global change. Global Change Biology **15**:2003-2019.

Crow, S.E., K. Lajtha, J. Brant, B. Caldwell, Y. Yano, R. D. Bowden, and E. Sulzman. 2009. Increased coniferous needle inputs accelerate decomposition of soil organic matter in an old-growth forest. Forest Ecology and Management 258 2224–2232.

van Verseveld, W.J., J. J. McDonnell, K. Lajtha. 2009. The role of hillslope hydrology in controlling nutrient loss. Journal of Hydrology 367: 177–187.

.

van Verseveld, W. J., J. J. McDonnell, and K. Lajtha. 2008. A mechanistic assessment of nutrient flushing at the catchment scale Journal of Hydrology **358**:268-287.

Tóth, J.A., K. Lajtha, Z. Kotroczó, Z. Krakomperger, B. Caldwell, R. Bowden, M. Papp. 2007. The Effect of Climate Change on Soil Organic Matter Decomposition. Acta Silv. Lign. Hung., 3: 75-85.

Crow, S. E., C. W. Swanston, K. Lajtha, J. R. Brooks, and H. Keirstead. 2007. Density fractionation of forest soils: methodological questions and interpretation of incubation results and turnover time in an ecosystem context. Biogeochemistry **85**:69-90.

Michener, R.M. and K. Lajtha, eds. 2007. Stable isotopes in ecology and environmental science. Blackwell Scientific, Oxford.

Marshall, J.D., J.R. Brooks, and K. Lajtha. 2007. Sources of variation in the stable isotopic composition of plants. Pp. 22-60. *In* Stable Isotopes in Ecology and Environmental Science 2nd Edition Eds. R. Mitchener and K. Lajtha. Blackwell Scientific, Oxford.

Beldin, S., B. Caldwell, P. Sollins, E. Sulzman, K. Lajtha, and S. Crow. 2007. Cation exchange capacity of density fractions from paired conifer/grassland soils. Biology and Fertility of Soils **43**:837-841

Horváth, L., E. Führer and K. Lajtha. 2006. Nitric oxide and nitrous oxide emission from Hungarian forests: link with atmospheric N deposition. Atmospheric Environment 40: 7786–7795.

Crow, S. E., E. W. Sulzman, W.D. Rugh, R.D. Bowden, and K. Lajtha. 2006. Isotopic analysis of respired CO_2 during decomposition of separated soil organic matter pools. Soil Biology and Biochemistry 38: 3279-3291.

Sollins, P., C. Swanston, M. Kleber, T. Filley, M. Kramer, S. Crow, B. Caldwell, K. Lajtha, and R. Bowden. 2006. Organic C and N stabilization in a forest soil: evidence from sequential density fractionation Soil Biology and Biochemistry 38:3313-3324.

Brenner, R. E., R. D. Boone, J. B. Jones, K. Lajtha, and R. W. Ruess. 2006. Successional and physical controls on the retention of nitrogen in an undisturbed boreal forest ecosystem. Oecologia **148**:602-611.

Carreira, J.A., B. Viñegla, and K. Lajtha. 2006. Secondary $CaCO_3$ and precipitation of P-Ca compounds control the retention of soil P in arid ecosystems. Journal of Arid Environments 64:460-473.

Horváth, L., E. Führer and K. Lajtha. 2005. Nitric oxide and nitrous oxide emission from Hungarian forests: link with atmospheric N deposition. Biogeosciences Discussions, 2, 703–723, 2005

Holub, S.M., K. Lajtha, J.D.H. Spears, J.A. Tóth, S.E. Crow, B.A.Caldwell, M. Papp, and P.T. Nagy. 2005. Organic matter manipulations have little effect on gross and net nitrogen transformations in two temperate forest mineral soils in the U.S.A and central Europe. Forest Ecology and Management 214:320-330.

Sulzman, E.W., J.B. Brant, R.D. Bowden, and K. Lajtha. 2005. Contribution of aboveground litter, belowground litter, and rhizosphere respiration to total soil CO_2 efflux in an old growth coniferous forest. Biogeochemistry 73:231 - 256

Lajtha, K., S. Crow, Y. Yano, S.S. Kaushal, E.W. Sulzman, P. Sollins, and J.D.H. Spears. 2005. Detrital controls on soil solution N and dissolved organic matter in soils: a field experiment. Biogeochemistry, 76:261-281.

Cairns, M. A., and K. Lajtha. 2005. Effects of succession on nitrogen export in the west-central Cascades, Oregon. Ecosystems **8**:583-601.

Yano, Y., K. Lajtha, P. Sollins, and B.A. Caldwell. 2005. Chemistry and dynamics of dissolved organic matter in a temperate coniferous forest on Andic soils: Effects of litter quality. Ecosystems 8: 286 - 300

Yano, Y., K. Lajtha, P. Sollins, and B.A. Caldwell. 2004. Chemical and seasonal controls on the dynamics of dissolved organic matter in a coniferous old-growth stand in the Pacific Northwest, USA. Biogeochemistry 71:197-223.

Spears, J.D.H. and K. Lajtha. 2004. The imprint of coarse woody debris on soil chemistry in the western Oregon Cascades, Biogeochemistry 71:163-175.

Johnston, C.A., P. Groffman, D.D. Breshears, Z.G. Cardon, W. Currie, W. Emanuel, J. Gaudinski, R.B. Jackson, K. Lajtha, K. Nadelhoffer, D. Nelson Jr., W. Mac Post, G. Retallack, R. Stallard, L. Wielopolski. 2004. The frontier below: Carbon cycling in soil. Frontiers in Ecology and the Environment 2: 522-528.

Holub, S.M. and K. Lajtha. 2004. The fate and retention of organic and inorganic ^{15}N-nitrogen in an old-growth forest soil in Western Oregon. Ecosystems 7:368-380.

K. Nadelhoffer, J. Aitkenhead, R. Boone, R. Bowden, J. Canary, J. Kaye, K. Lajtha, W. McDowell, P. Micks, and A. Ricca. 2004. The DIRT experiment: litter and root influences on forest soil organic matter stocks and function. Chapter 15 *in*: D. Foster and J. Aber (eds.), Forests in Time: The Environmental Consequences of 1000 Years of Change in New England. Yale University Press, pp. 300-315.

Holub, S.M. and K. Lajtha. 2003. Mass loss and nitrogen dynamics during the decomposition of a ^{15}N-labeled N_2-fixing epiphytic lichen, *Lobaria oregana* . Canadian Journal of Botany 81:698-705.

Spears, J.D.H., S.M. Holub, M.E. Harmon, and K. Lajtha. 2003. The influence of decomposing logs on soil biology and nutrient cycling in an old-growth mixed coniferous forest in Oregon, USA. Canadian Journal of Forest Research 33: 2193-2201.

Vanderbilt, K.L., K. Lajtha and F. Swanson. 2003. Biogeochemistry of unpolluted forested watersheds in the Oregon Cascades: temporal patterns of precipitation and stream nitrogen fluxes. Biogeochemistry 62:87-117.

Mayer, B., E.W. Boyer, C. Goodale, N. A. Jaworski, N. van Breemen, R. W. Howarth, S. Seitzinger, G. Billen, K. Lajtha, K. Nadelhoffer, D. Van Dam, L.J. Hetling, M. Nosil, and K. Paustian. 2002. Sources of nitrate in rivers draining 16 major watersheds in the northeastern US: Isotopic constraints. Biogeochemistry 57/58: 171–197.

van Breemen, N., E. Boyer, C. Goodale, N. Jaworski, K. Paustian, S. Seitzinger, K. Lajtha, B. Mayer, D. Van Dam, R.W. Howarth, K.J. Nadelhoffer, M. Eve and G. Billen. 2002. Where did all the nitrogen go? Fate of nitrogen inputs to large watersheds in the northeastern U.S.A. Biogeochemistry 57/58: 267–293.

Goodale, C. L., K. Lajtha, K. J. Nadelhoffer, E. A. Boyer, N. A. Jaworski. 2002. Forest nitrogen sinks in large eastern U.S. watersheds: estimate from forest inventory and an ecosystem model. Biogeochemistry 57/58: 239-266.

Holub, S.M., J.D.H. Spears, K. Lajtha. 2001. A reanalysis of nutrient dynamics in coniferous coarse woody debris. Canadian Journal of Forest Research 31: 1894-1902.

Spears, J.D.H., K. Lajtha, B. A. Caldwell, S. B. Pennington, and K. Vanderbilt. 2001. Species effects of Ceanothus velutinus versus Pseudotsuga menziesii, Douglas-fir, on soil phosphorus and nitrogen properties in the Oregon Cascades. Forest Ecology and Management 149:205-216.

Lajtha, K. 2000. Ecosystem nutrient balance and dynamics. Pages 249-264 in: Sala, O., R. Jackson, H. Mooney and R. Howarth. *Methods in Ecosystem Science*. Springer-Verlag, New York.

Lajtha, K. and K. Vanderbilt, eds. 2000. Cooperation in Long Term Ecological Research in Central and Eastern Europe: Proceedings of the ILTER Regional Workshop, 22-25 June, 1999, Budapest, Hungary. Oregon State University, Corvallis, OR.

Nadelhoffer, K., R. Bowden, R. Boone, and K. Lajtha. 2000. Controls on forest soil organic matter development and dynamics: chronic litter manipulation as a potential international LTER activity. Pp. 3-9 in: Lajtha, K. and K. Vanderbilt, eds. 2000. Cooperation in Long Term Ecological Research in Central and Eastern

Europe: Proceedings of the ILTER Regional Workshop, 22-25 June, 1999, Budapest, Hungary. Oregon State University, Corvallis, OR.

Joyce, L.A., J.J. Landsberg, M. Stafford Smith, J. Ben-Asher, R. Cavazos Doria, K. Lajtha, G.E. Likens, A. Perevolotsky, and U.N. Safriel. 1999. Ecosystem-level consequences of management options. Pages 97 – 116 in: Hoekstra, T.W. and M. Shachak, eds. Arid Lands Management: Towards Ecological Sustainability. University of Illinois Press, Urbana.

Jamil, A., K. Lajtha, S. Radan, G. Ruzsa, and S. Cristofor. 1999. Mussels as bioindicators of trace metal pollution in the Danube Delta of Romania. Hydrobiologia 392:143-158.

Harmon, M.E. and K. Lajtha. 1999. Analysis of detritus and organic horizons for mineral and carbon constituents. Pages 143-165 in: Robertson, G.P., C.S. Bledsoe, D.C. Coleman, and P. Sollins, eds. *Standard Soil Methods for Long Term Ecological Research*. Oxford University Press, New York.

Robertson, G.P., P. Sollins, B.G. Ellis, and K. Lajtha. 1999. Exchangeable ions, pH, and cation exchange capacity. Pages 106-114 in: Robertson, G.P., C.S. Bledsoe, D.C. Coleman, and P. Sollins, eds. *Standard Soil Methods for Long Term Ecological Research*. Oxford University Press, New York.

Sollins, P., C. Glassman, E. Paul, K. Lajtha, J. Heil, and E.T. Elliott. 1999. Soil carbon and nitrogen: pools and fractions. Pages 89-105 in: Robertson, G.P., C.S. Bledsoe, D.C. Coleman, and P. Sollins, eds. *Standard Soil Methods for Long Term Ecological Research*. Oxford University Press, New York.

Lajtha, K., C. Driscoll, W. Jarrell, and E.T. Elliott. 1999. Soil phosphorus: characterization and total element analysis. Pages 115-142 in: Robertson, G.P., C.S. Bledsoe, D.C. Coleman, and P. Sollins, eds. *Standard Soil Methods for Long Term Ecological Research*. Oxford University Press, New York.

Lajtha, K., W. Jarrell, D.W. Johnson, and P. Sollins. 1999. Collection of soil solution. Pages 166-182 in: Robertson, G.P., C.S. Bledsoe, D.C. Coleman, and P. Sollins, eds. *Standard Soil Methods for Long Term Ecological Research*. Oxford University Press, New York.

Valiela, I., P. Peckol, C. D'Avanzo, J. Kremer, D. Hersh, K. Foreman, K. Lajtha, B. Seely, W.R. Geyer, T. Isaji, and R. Crawford. 1998. Ecological effects of major storms on coastal watersheds and coastal waters: Hurricane Bob on Cape Cod. J. Coastal Research 14: 218-238.

Lajtha, K. 1998. Forest ecosystems in a changing global context. Pages 1791 - 1802 in Meyers, R.A., ed. *Encyclopedia of Environmental Analysis and Remediation*. John Wiley and Sons, NY.

Keller, B.E.M., K. Lajtha, and S. Cristofor. 1998. Trace metal concentrations in the sediments and plants of the Danube Delta, Romania. Wetlands 18:42-50.

Seely, B., K. Lajtha, and G. Salvucci. 1998. The dynamics of N fluxes from canopy to ground water in a coastal forest ecosystem developed on sandy substrates. Biogeochemistry 42: 325-343.

Valiela, I., G. Collins, J. Kremer, K. Lajtha, M. Geist, B. Seely, J. Brawley, and C.-H. Sham. 1997. Nitrogen loading from coastal watersheds to receiving waters: Review of methods and calculation of loading to Waquoit Bay. Ecological Applications 7: 358-380.

Carreira, J.A. and K. Lajtha. 1997. Factors affecting phosphate sorption along a Mediterranean, dolomitic soil and vegetation sequence. European Journal of Soil Science 48: 139-149.

Lajtha, K. K. Kolberg, and J. Getz. 1997. Ecophysiology of the saguaro cactus (Carnegiea gigantea) in the Saguaro National Monument: relationship to symptoms of decline. J. Arid Environ. 36: 579-590.

Kolberg, K. and K. Lajtha. 1997. Population dynamics and trace metal biogeochemistry of the saguaro cactus (Carnegiea gigantea) in the Sonoran Desert. Ecoscience 4: 223-231.

Whytemare, A.B., R.L. Edmonds, J.D. Aber, and K. Lajtha. 1997. Influence of excess nitrogen deposition on a white spruce (Picea glauca) stand in southern Alaska. Biogeochemistry 38: 173-187.

Carreira, J.A., K. Lajtha, and F.X. Niell. 1997. Phosphorus transformations along a soil/vegetation series of fire-prone, dolomitic, semi-arid shrublands of southern Spain. Biogeochemistry 39: 87-120.

Seely, B. and K. Lajtha. 1997. Application of a ^{15}N tracer to simulate and track the fate of atmospherically-deposited N in the coastal forests of the Waquoit Bay Watershed, Cape Cod, MA. Oecologia 112: 393-402.

Valiela, I., P. Peckol, C. D'Avanzo, K. Lajtha, J. Kremer, W.R. Geyer, K. Foreman, D. Hersh, B. Seely, T. Isaji, and R. Crawford. 1996. Hurricane Bob on Cape Cod. American Scientist 84: 154-165.

Dudley, J. L., B. Michener, and K. Lajtha. 1996. The contributions of nitrogen-fixing symbioses to coastal heathland succession. The American Midland Naturalist 135: 334-342.

Howarth, R.W., G. Billen, D. Swaney, A. Townsend, N. Jaworski, K. Lajtha, J.A. Downing, R. Elmgren, N. Caraco, T. Jordan, F. Berendse, J. Freney, V. Kudeyarov, P. Murdoch, and Z. Zhao-lang. 1996. Regional nitrogen budgets and riverine N & P fluxes for the drainages to the North Atlantic Ocean: natural and human influences. Biogeochemistry 35: 75-139.

Lajtha, K., B. Seely, and I. Valiela. 1995. Retention and leaching losses of atmospherically-derived nitrogen in the aggrading coastal watershed of Waquoit Bay, MA. Biogeochemistry 28: 33-54.

Lajtha, K. and A.F. Harrison. 1995. Strategies of phosphorus acquisition and conservation by plant species and communities. pp. 139-147 in: H. Tiessen, ed., Phosphorus in the global environment: Transfers, cycles, and management. SCOPE 54. John Wiley and Sons, Chichester.

Lajtha, K. and J.D. Marshall. 1994. Sources of variation in the stable isotopic composition of plants. pp. 1-21 in Lajtha, K. and R.M. Michener, eds., Stable isotopes in ecology and environmental science. Blackwell Scientific, Oxford.

Lajtha, K. and R.M. Michener, eds. 1994. Stable isotopes in ecology and environmental science. Blackwell Scientific, Oxford.

Lajtha, K. 1994. Nutrient ion uptake and growth in eastern deciduous tree seedlings. Plant and Soil 160: 193-199.

Carreira, J.A., F.X. Niell, and K. Lajtha. 1994. Soil nitrogen availability and nitrification in Mediterranean shrublands of varying fire history and successional stage. Biogeochemistry 26: 189-209.

Lajtha, K. and J. Getz. 1993. Photosynthesis and water-use efficiency in pinyon-juniper communities along an elevation gradient in northern New Mexico. Oecologia 94: 95-101.

Dudley, J.L. and K. Lajtha. 1993. The effects of prescribed burning on nutrient availability and primary production in sandplain grasslands. Am. Midl. Nat. 130: 286-298.

Lajtha, K. 1992. Forest ecosystems. pp 241-251 in W.A. Nierenberg, ed. Encyclopedia of Earth System Science. Academic Press, Orlando.

Lajtha, K. and K.A. Kolberg. 1992. Ecophysiological and toxic element studies of the saguaro cactus in Saguaro National Monument. pp 47-55 in: C.P. Stone and E.S. Bellantoni, eds. Proceedings of the symposium on Research in Saguaro National Monument. Southwest Parks and Monuments Assoc., Tucson.

Padien, D.J. and K. Lajtha. 1992. Plant spatial pattern and nutrient distribution in pinyon-juniper woodlands along an elevational gradient in northern New Mexico. International Journal of Plant Sciences 153: 425-433.

Barford, C. and K. Lajtha. 1992. Nitrification and nitrate reductase activity along a secondary successional gradient. Plant and Soil 145: 1-10.

Valiela, I., K. Foreman, M. LaMontagne, D. Hersh, J. Costa, P. Peckol, B. DeMeo-Anderson, C. D'Avanzo, M. Babione, C.-H. Sham, J. Brawley, and K. Lajtha. 1992. Couplings of watersheds and coastal waters: sources and consequences of nutrient enrichment in Waquoit Bay. Estuaries 15: 443-457.

Lajtha, K. and F.J. Barnes. 1991. Carbon gain and water use in pinyon pine-juniper woodlands of northern New Mexico: field versus phytotron chamber measurements. Tree Physiology 9: 59-67.

Lajtha, K. and W.G. Whitford. 1989. The effect of water and nitrogen amendments on photosynthesis, leaf demography, and resource-use efficiency in Larrea tridentata, a desert evergreen shrub. Oecologia 80: 341-349.

Lajtha, K. and W.H. Schlesinger. 1988. The biogeochemistry of phosphorus cycling and phosphorus availability along a desert soil chronosequence. Ecology 69: 24-39.

Lajtha, K. 1988. The use of ion exchange resin bags for measuring nutrient availability in an arid ecosystem. Plant and Soil 105: 105-111.

Lajtha, K. and S.H. Bloomer. 1988. Factors affecting phosphorus adsorption and phosphorus retention in an arid ecosystem. Soil Science 146: 160-167.

Lajtha, K. and M. Klein. 1988. The effect of varying nitrogen and phosphorus availability on nutrient use by Larrea tridentata, a desert evergreen shrub. Oecologia 75: 348-353.

Lajtha, K. and W.H. Schlesinger. 1988. The effect of $CaCO_3$ on the uptake of phosphorus by two desert shrub species, Larrea tridentata (DC.) Cov. and Parthenium incanum H.B.K. Botanical Gazette 149: 328-334.

Lajtha, K., J. Weishampel, and W.H. Schlesinger. 1987. Phosphorus and pH tolerances in the germination of the desert shrub Larrea tridentata. Madrono 34: 35-40.

Lajtha, K. 1987. Nutrient reabsorption efficiency and the response to phosphorus fertilization in the desert shrub Larrea tridentata (DC.) Cov. Biogeochemistry 4: 265-276.

Lajtha, K. and W.H. Schlesinger. 1986. Plant response to variations in nitrogen availability in a desert shrubland community. Biogeochemistry 2: 29-37.

Morris, J.T. and K. Lajtha. 1986. Decomposition and nutrient dynamics of litter from four species of freshwater macrophytes. Hydrobiologia 131: 215-223.

Banay-Schwartz, M., K. Lajtha, H. Sershen, and A. Lajtha. 1977. Temperature dependence of amino-acid transport in brain slices. Neurochemical Research 2: 695-706.

Book reviews:

2008 Marschner, P. And Z. Rengel, eds. 2007. Nutrient cycling in terrestrial ecosystems. Springer, New York. (Ecology 89:1476-1477)

2004 Bashkin, V.N. 2002. Modern biogeochemistry. Kluwer, Academic Publishers, Boston. (Ecology 85:290)

2002 Belnap, J. and O.L. Lange (eds.). 2001. Biological soil crusts: Structure, function, and management. Springer-Verlag, New York. (Ecology 83:1768)

1995 Caldwell, M.M. and R.W. Pearcy (eds.). 1994. Exploitation of environmental heterogeneity by plants: ecophysiological processes above- and belowground. Academic Press, San Diego. (Ecology 76: 313)

1987 Stevenson, F.J. 1986. Cycles of soil: carbon, nitrogen, phosphorus, sulfur, micronutrients. John Wiley and Sons, NY. (Ecology 68: 457-458)

Pickett, S.T.A. and P.S. White (eds.). 1985. The ecology of natural disturbance and patch dynamics. Academic Press, NY. (Journal of Environmental Quality 16: 286-287)

1986 Howard, J.A. and C.W. Mitchell. 1985. Phytogeomorphology. John Wiley and Sons, NY. (Ecology 67: 823)